

DASHEEN MOSAIC VIRUS OF PHILODENDRON SCANDENS SUBSP. OXYCARDIUM

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In 1975, die species of *Philodendron* accounted for 20% of Florida's 150 million dollar foliage industry, *Philodendron scandens* C. Koch & H. Sello subsp, *oxycardium* (Schott) Bunt., sometimes referred to as *P. cordatum* Hort., is without doubt the most widely cultivated of the philodendrons and constitutes a 4.2 million dollar industry in this State (1).

Dasheen mosaic virus was first described in 1970 in various aroids, including those ornamentals such as *Aglaonema*, *Caladium*, and *Dieffenbachia* (2, 3, 4). Recently, this virus was reported in *P. scandens* subsp. *oxycardium*, and studies (Wisler, Zettler, unpublished) suggest that this virus may cause significant losses. Indeed, unidentified virus-like disorders of this plant have been reported since the late 1950s by the Division of Plant Industry (unpublished records), and it is likely that dasheen mosaic virus was responsible in some instances.

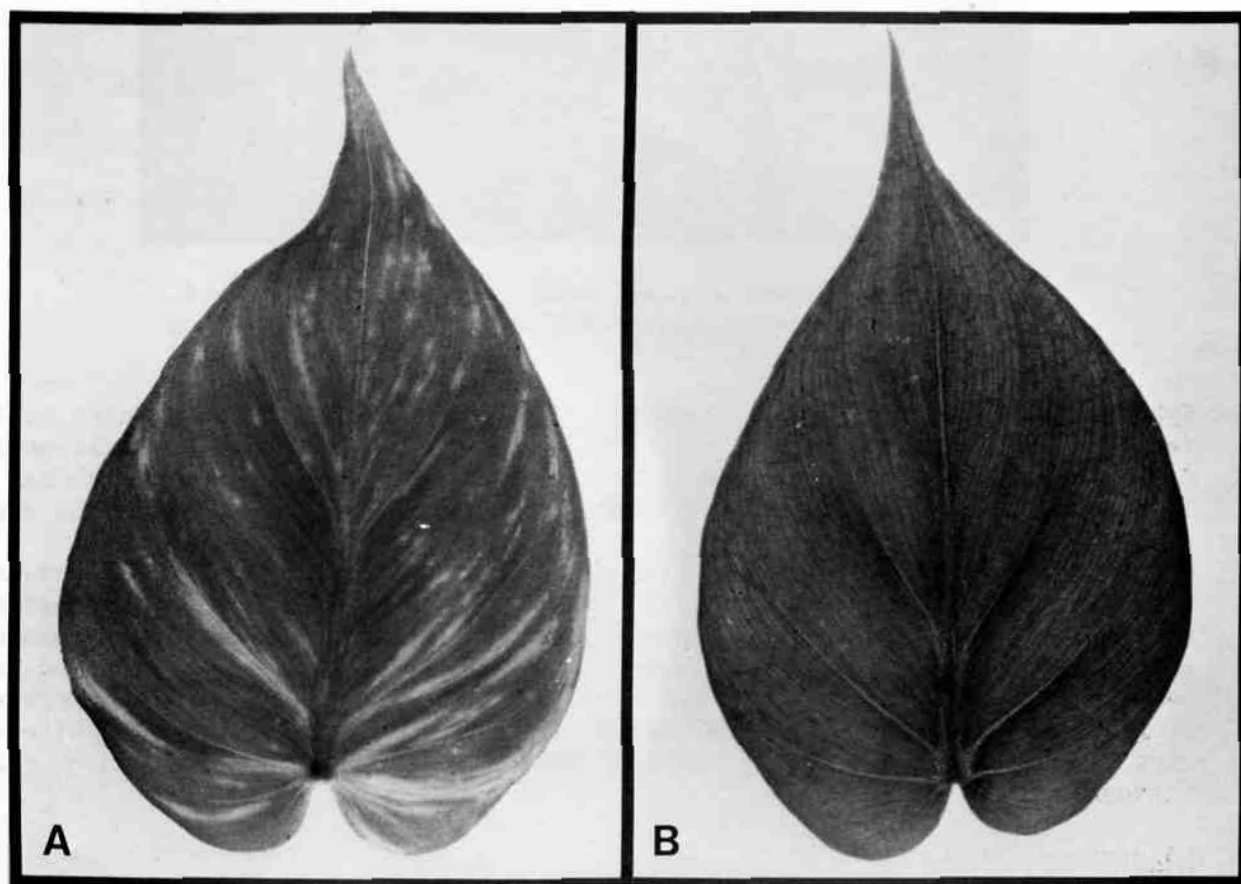


Fig. 1. *Philodendron scandens* subsp. *oxycardium* leaves. A. Chlorotic banding characteristic of dasheen mosaic. B. Healthy leaves.

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SYMPTOMS. The most obvious symptom of infection by dasheen mosaic virus in *P. scandens* subsp. *oxycardium* is the formation of chlorotic bands in the leaves, which are parallel to, but not delimited by, the veins (fig. 1A). Leaves with these symptoms are generally somewhat smaller than normal and may be distorted so that the typical heart-shape of the leaf is not apparent (fig- 2). Mosaic symptoms are most conspicuous on newly unfurled leaves and may fade as the leaves attain maturity.

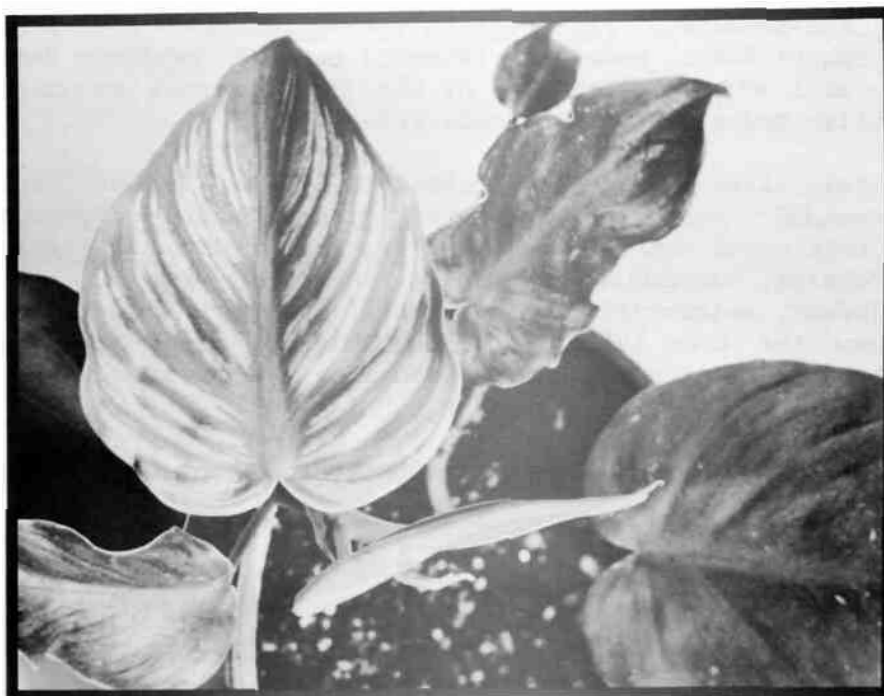


Fig. 2. Philodendron plant with chlorotic banding and leaf distortion caused by dasheen mosaic virus.

Symptoms may vary from plant to plant. In some cases, the vine length of infected plants may be reduced considerably with each leaf showing mosaic and/or distortion symptoms. In other instances, the reduction in vine length may be less apparent, and symptoms may be intermittently distributed along the vine.

CONTROL. Since dasheen mosaic virus can be transmitted in a stylet-borne manner to healthy plants by aphids (2, 3, 4), good insect control is important. Because this virus can be perpetuated indefinitely by vegetative propagation, cuttings should not be taken from virus-infected plants. As an added precaution, diseased plants should be rogued from nursery plantings and destroyed. At present, this virus does not seem to pose a serious threat to the philodendron industry if good insect control, sanitation measures, and healthy stock are used.

Literature Cited

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